# Ericsson GA628 Mobile Phone for the GSM Network User's Manual



The C€ symbol on our products signifies that they have been certified according to the EMC directive 89/336/EEC, the Telecommunications directive 91/263/EEC, and the Low Voltage directive 73/23/EEC when applicable. The products fulfil the requirements according to the following standards:

#### Cellular Phones and Accessories in Combination:

ETS 300 342-1 EMC for European digital cellular telecommunications.

#### **Accessories Without Direct Connection to a Cellular Phone:**

EN 50081 Electromagnetic compatibility, Generic Emission Standard

EN 50082 Electromagnetic compatibility, Generic Immunity Standard.

#### Third edition (May 1998)

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INNOVATRON PATENTS

# Congratulations...

and thank you for buying the GA628, a product specially suited for the user who wants an Ericsson mobile phone a little bit out of the ordinary but with the same reliability and high quality that all other Ericsson

The GA628 comes with a wide range of front panels that makes it possible for you to match the phone to suit your different moods.

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.:ts in the every day use of your <sub>F</sub>

This manual introduces you to your mobile phone and shows you how to get the most out of your new product and contains the following information:

An introduction to your phone and how to make it ready for use.

How to deal with phone calls and all the features available to you before, during and after a telephone conversation.

How to personalize and set up the phone to meet your requirements in the every day use of your phone.

An explanation of how network services can help you to always keep in touch with other people and the latest area information.

How it is possible to keep track of and restrict phone

We advise you to read the safety information before you start using your phone.

Bricegon Mobile Communications AB

# Guidelines for Safe and Efficient Use

#### Read this information before using your portable phone

#### General

Since its introduction in the mid 1980s the portable phone is one of the most exciting and innovative products ever developed. With it, you can stay in contact with your office, your home, emergency services, and others.

Your telephone is a radio transmitter and receiver. When it is ON it receives and also sends out radio frequency (RF) energy. Depending upon the type of mobile phone you have purchased, it operates in different frequency ranges and employs commonly used modulation techniques. When you use your phone, the system handling your call controls the power level at which your phone transmits.

For safe and efficient operation of your phone, observe these guidelines.

#### Exposure to Radio Frequency Energy

The International Commission on Non-Ionizing Radiation Protection (ICNIRP), sponsored by the World Health Organization (WHO), published a statement in 1996 which sets limits for exposure to RF fields from handheld mobile phone. According to this statement, which is based on the available body of research, there is no evidence that mobile terminals meeting the recommended limits can cause any adverse health effects.

All Ericsson telephones conform to the ICNIRP recommended.

ommendations, and international exposure standards, such as:

- CENELEC European
   Pre-standard ENV50166-2
- ANSI/IEEE C95.1-1992 (USA, Asia-Pacific)

If you want to limit RF exposure even further, you may choose to control the duration of your calls and operate your phone in the most power efficient manner.

#### Efficient Phone Operation

How to use your phone for optimum performance with minimum power consumption:

- Hold the phone as you would any other telephone.
   While speaking directly into the mouthpiece, angle
  the antenna in a direction up and over your shoulder. If the antenna is extendable, it should be extended during a call.
- Do not hold the antenna when the phone is in use.
   Holding the antenna affects call quality, may cause the phone to operate at a higher power level than needed and shorten talk and standby times.

#### Antenna Care and Replacement

The antenna is sensitive and should not be bent since this will reduce its performance.

Do not use the phone with a damaged antenna. Replace a damaged antenna immediately. Consult your

manual to see if you may change the antenna yourself. If so, use only an Ericsson approved antenna. Otherwise, take your phone to a qualified service centre for repair.

Use only the designated Ericsson antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate the appropriate regulations.

Do not use an antenna designed for any other type of portable telephone than the telephone you have purchased.

#### **Driving**

Check the laws and regulations on the use of telephones in the areas where you drive. Always obey them. Also, when using your phone while driving, please:

- · Give full attention to driving.
- Use handsfree operation, if available.
- Pull off the road and park before making or answering a call if driving conditions so require.

RF energy may affect some electronic systems in motor vehicles. In addition, some vehicle manufacturers forbid the use of mobile phones in their vehicles. Check with your vehicle manufacturer's representative to be sure your phone will not affect the electronic systems of your vehicle.

#### Electronic devices

Most modern electronic equipment, for example, equipment in hospitals and cars, is shielded from RF energy. However, RF energy from telephones may affect some electronic equipment.

Turn your phone OFF in health care facilities when regulations posted in the areas instruct you to do so. Always request permission before using your phone near medical equipment.

Mobile telephones may affect the operation of some implanted cardiac pacemakers, equipment for people with hearing impairments and other medically implanted equipment. Pacemaker patients should be aware that the use of a mobile phone very close to a pacemaker may cause the device to malfunction.

Avoid placing the phone over the pacemaker, i.e. in your breast pocket. When using the phone, place it at your ear opposite the pacemaker. If a distance of 15 cm is kept between the phone and the pacemaker, the risk of interference is limited. Contact your cardiologist for more information.

#### Aircraft

Turn your phone OFF before boarding any aircraft.

- Use it on the ground only with crew permission
- Turn off your phone before the aircraft leaves the ground. Do not use it in the air.

To prevent possible interference with aircraft systems, safety regulations require you to have permission from a crew member to use your phone while the plane is on the ground. To prevent interference with commu-

nication systems, you must not use your phone while the plane is in the air.

#### **Power Supply**

- Connect AC (Power supply) only to designated power sources as marked on the product.
- To reduce risk of damage to electric cord, remove from outlet by holding onto AC adapter rather than cord.
- Make sure the cord is located so that it will not be stepped on, tripped over or otherwise subjected to damage or stress.
- To reduce risk of electric shock, unplug unit from power source before attempting any cleaning, then use soft cloth dampened on with water.

#### Children

Do not allow children to play with your phone. Children could hurt themselves or others. Children could also damage the phone or make calls that increase your telephone bills.

#### Blasting Areas

To avoid interfering with blasting operations, turn your unit OFF when in a "blasting area" or in areas posted "turn off two-way radio". Construction crews often use remote control RF devices to set off explosives.

#### Potentially Explosive Atmospheres

Turn your phone OFF when in any area with a potentially explosive atmosphere. It is rare, but your phone or its accessories could generate sparks. Sparks in such

areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often, but not always, clearly marked. They include fuelling areas, such as gas stations, below deck on boats, fuel or chemical transfer or storage facilities, and areas where the air contains chemicals or particles, such as grain, dust, or metal powders.

Do not transport or store flammable gas, liquid, or explosives in the compartment of your vehicle which contains your phone and accessories.

#### Product care

- Do not expose product to water or moisture, for example: bathtub, laundry sink, wet/damp basement, swimming pools, etc.
- Do not expose product to extreme temperatures such as found near a hot radiator or stove, or in a car parked in the sun.
- **Do not** expose product to extreme cold temperatures such as a car parked outdoors in winter.
- Do not expose product to lit candles, cigarettes, cigars, open flames, etc.
- Use only Ericsson Original accessories. Failure to do so may result in loss of performance, fire, electric shock, or injury, and will void the warranty.

**Do not** attempt to disassemble the product. Doing so will void warranty. This product does not contain consumer serviceable components. Service should only be performed by Authorized Service Centres.

# **Table of Contents**

Guidelines for Safe and Efficient Use	i	Using Phone as Scratch Pad Sending Tone Signals	9 9	Diverting Calls Diverting Your Calls	<b>17</b>
Your Phone	1	Checking Time of Calls	9	Viewing Status of Call Divert	17
Assembly Instructions	2	Calling Line		Cancelling Call Divert	17
Assemble and Charge	2	Identification (CLI)	9	Protecting Your Keypad,	
Inserting SIM Card	2	Handling Two Calls	9	Phone and SIM Card	18
Attaching Battery	3	Navigating the	2.3	Locks	18
The Charging Function	3	Menu System	11	Keypad Lock	18
Changing the Front Panel	4	The Menu System	11	Card Lock (SIM)	18
The Battery and the SIM Card	5	Moving Through the	Da.	Changing PIN	18
Turning On the Phone		Menu System	- 11	Unblocking with PUK	18
and General Information	6	Selecting the		Phone Lock	19
Turning On the Phone	6	Ring Vol(ume) Menu	11	(Un)Locking Phone	19
The Display	6	Menu Overview	12	Barring Calls –	
Changing Display Language	6	Creating Your Own		Restricting Calls	20
	-	Phone Book	13	Activating Call Bars for	
Making and Receiving Calls  Making a Call	8	The Phone Book	13	Any Call Type	20
Ending a Call	8 8	Storing Numbers on SIM Card	13	Cancelling All Call Bars	20
Making an International Call	8	Storing Numbers in		Sending and Receiving	
Making an Emergency Call	0	Phone's Memory	13	Text Messages	21
Retry Function	8	Recalling Phone Numbers	14	Text Messages	21
Receiving a Call	8	Position Recall	14	Checking Subscription	21
Answering a Call	8	Deleting Storage Position	14	Setting Service	
Rejecting a Call	0		14	Centre Address	21
Putting a Call on Hold	0	Last Dialled Numbers	15	Sending SMS	21
ŭ .	0	Unanswered Calls	15	Receiving a Message	21
Useful Information		Personalizing Your Phone	16	Reading an Old Message	22
while Talking	9	Changing Ring Volume	16		
Changing Volume while Talking	9	Ring Type	16		
Muting Microphone	9	Display Language	16		
withing witerophone	,	Changing Key Sound	16		

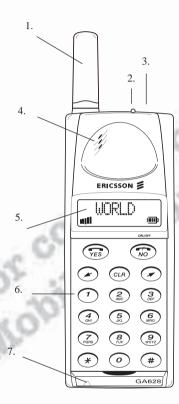
EN/LZT 126 1352/x R2A iii

Receiving Area Information Area Information	<b>23</b>	Two Line Service Selecting a Line	<b>25</b> 25	About Call Cost Cost Limit Option	26 26
Activating the	20	Different Settings for Each Line	25	Your Phone and	- V
Area Information	23	Personalizing Names for the		Accessories	28
Adding a Code	23	Two Lines	25	Front Panel	28
Erasing a Code	23	The Call Time/Call Cost	26	Handsfree Equipment	28
Changing a Code	23	About Duration of Calls	26	PC-Card	28
Other Networks	24	Viewing Calling Information	26	Index	29
Selecting a Network	24	Resetting a Call Meter	26	TUTILGE	
-Cirics	50	MODE			
iv					EN/LZT 126

# Your Phone

The parts list corresponds to Figures 1 and 2:

- 1. Antenna
- 2. Status light
- 3. Beeper
- 4. Earpiece
- 5. Display
- 6. Keypad
- 7. Microphone
- 8. Charging connector
- 9. Battery
- 10. SIM Card holder
- 11. Phone clip holder
- 12. External antenna connector



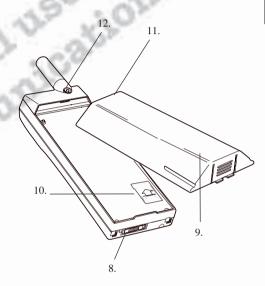


Figure 1. Front view of your phone.

Figure 2. Semi-back view of your phone.

# Assembly Instructions

This chapter describes how you assemble the phone, what the SIM Card is, and how you handle the battery.

# **Assemble and Charge**

- Insert the SIM Card.
- · Attach the battery.
- · Connect the charger to the phone.
- · Connect the charger to the mains.
- Changing the front panel.

# **Inserting SIM Card**

Insert the SIM Card into the SIM Card holder as described in Figure 3 and lock the holder.

Make sure the cut corner of the SIM Card is placed as in Figure 3.

# Removing SIM Card

- 1. Make sure the battery is removed.
- 2. Lift up the SIM Card holder as described in Figure 3.
- 3. Pull out the SIM Card.

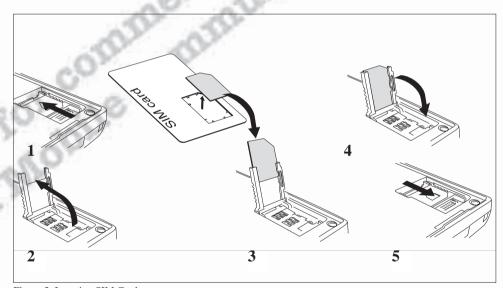


Figure 3. Inserting SIM Card

# **Attaching Battery**

Place the battery on top of the phone and push until you hear a click (see Figure 4).

#### Removing Battery

- 1. Make sure the phone is turned off.
- 2. Press the locking catch on the bottom of the battery (see Figure 4).
- 3. Lift the battery up and away from the phone.

# The Charging Function

When the battery is low a warning signal will sound and the empty battery icon in the display will start to flash. The indicator light at the top of the phone will be flashing red.

The warning signal will be repeated and after a short moment the phone will be turned off.

#### Connecting and Disconnecting Charger

Have the battery attached to the phone and connect the charger as described in Figure 5. The flash symbol on the charger plug must be facing upwards.

To disconnect the charger lift the plug up and pull it out (see Figure 5).

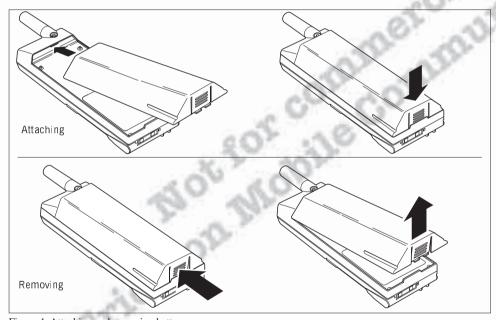


Figure 4. Attaching and removing battery.

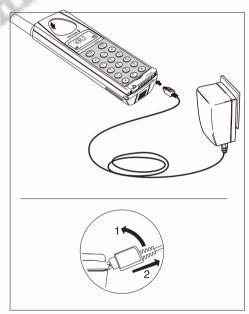


Figure 5. Connecting and disconnecting charger.

#### Connecting Charger to Mains

Plug the charger into a mains socket. The phone now starts to charge the battery and you can see the battery meter in the display move while charging.

#### Charging the Battery

When you connect the charger to the phone, the battery is charged. When the battery is fully charged, the charging stops. You cannot overcharge your battery.

When you are charging the battery you can use your phone as normal; however the charging time will be longer.

- Connect the charger to the phone.
- · Connect the charger to the mains.

#### When the phone is turned on:

The indicator will show a steady green light. To show that the battery is being charged the battery icon in the display is filled and emptied continuously.

When the battery is fully charged the battery icon in the display will show all three bars.

#### When the phone is turned off:

The indicator will show a steady red light. To show that the battery is being charged the battery icon in the display is filled and emptied continuously.

When the battery is fully charged the battery icon in the display will show all three bars and the indicator will show a steady green light.

# **Changing the Front Panel**

It is very important that the phone always is used with a front panel. This will prevent dust and dirt to get into the phone which will reduce the phone's functionality.

#### The Raised Front Panel Markings

The front panel has raised markings around the left/right arrows and key 5, in order to help you find



#### Removing the Front Panel

1. Lift the bottom of the front panel with your thumb and push it towards the display.

Be careful to not bend the front panel too much since it may break.



2. Pull out the front panel from the phone.



#### Mounting the Front Panel

1. Insert the top of the front panel into the two slots above the YES and NO keys. Make sure that the raised markings on the front panel are facing up.



2. Hold the phone horizontally and drop the panel onto the face of the phone.



3. Insert the pegs at the bottom of the front panel into the recess in the phone by carefully bending the front panel and pushing it towards the display. Be careful not to bend the front panel too much since it may break.



### The Battery and the SIM Card

#### The Battery

Your phone is supplied with a Nickel Metal Hydride battery. The battery is not charged before shipment, even though there might be enough power to turn the phone on.

Remember to recycle the battery when you will not use it anymore.

#### The SIM Card

Before you can start using your phone, you need to order a SIM Card from a GSM service provider. The

SIM Card is a computer circuit that keeps track of your phone number, the services that you have ordered from the service provider, and your phone book information.

The SIM Card sometimes contains information that lets the phone automatically change the display texts into the language of the SIM Card.

Your SIM Card is supplied with a security code or PIN (Personal Identity Number) that you need to enter into the phone to gain access to the phone and network.

# Turning On the Phone and General Information

This chapter describes the display information you receive from your phone when you use it.

# **Turning On the Phone**

1. Press and hold down the NO key until you hear a click. The display will prompt you to enter the PIN (the security code that follows your SIM Card).

PIN:

2. Enter the PIN and press YES. The PIN is indicated as \*\*\*\* in the display.

.re 6. Standby display. If you entered the PIN correctly, you will be welcomed by your phone and it then starts searching for a network.

When a network is found, the indicator light on top of the phone flashes green once every second and the standby display is shown (see Figure 6).



#### Turning Off the Phone

• Press and hold the NO key until you hear a click and the display is dark.

# The Display

Your phone display will help you to:

- · Verify that you are dialling correctly.
- · Check your battery status.
- · Check your signal strength and service availability.
- · Indicate that you have received messages.

# **Changing Display Language**

To change the display language see Personalizing Your Phone, p. 16.

#### Looking at the Display

Figure 7 shows how the display looks when the entire icon row is lit. Table 1 explains what each icon means.



Figure 7. Display with all icons lit.

Note! All icons may not be visible at all times.

Table 1. Description of icons.

	Table 1. Description of	i icons.
hows how the display looks when the entire s lit. Table 1 explains what each icon means.	Icon:	Indicates:
	WORLD	Network
WORLD		The name and country of the network.
		Signal Strength
		The received signal strength in five steps, depending on the strength of the signal.
Display with all icons lit.		Line
	2	Whether line 1 or 2 is active. The icon is lit when the corresponding line is activated. These icons only show when you have two lines on your SIM
icons may not be visible at all times.		Card.
		Divert
	450	That the phone has a divert active. The arrows correspond to the diverted line.
	W.	Silent Ring Signal
a f		That no ring signal will sound when the phone is ringing.
		Letter
200	1000	That you have received a short text message or area information.
40,00		Phone
3- 3	•	That you are engaged in a call.
-0-	111111111111111111111111111111111111111	Battery
40.	/====	The current battery strength – more bars means more power remaining.
Cop		
200		
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# Making and Receiving Calls

# Making a Call

- 1. Enter the area code and phone number. The phone number is shown in the display.
- If the number is longer than 12 characters, the beginning of the number will be shown as an arrow

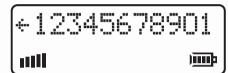


Figure 8. Number with more than 12 characters.

(see Figure 8).

To erase a digit, press CLR. To erase the entire phone number, press and hold down CLR for a couple of seconds.

Press YES to make the call. The display shows Calling, followed by Connecting and the phone icon is lit.

# **Ending a Call**

· Press NO to end the call.

# **Making an International Call**

 Press and hold the zero key until the international + prefix is displayed.

- 2. Enter the country code, area code (without any leading zero) and the phone number.
- 3. Press YES to make the call.

# Making an Emergency Call

 Enter 112 (The international emergency number) and press YES.

The 112 emergency number can be used in any country with or without a SIM Card, provided a GSM network is within range.

**Note!** Some operators may require that a SIM Card has been inserted into the phone and that the PIN code has been entered.

# **Retry Function**

If the call connection fails or if the number you are trying to reach is busy, the display shows **Retry?**. Press YES to re-dial the number, otherwise NO.

If you press YES, the number will automatically be redialled until the call is answered, or 10 times at the most. If you press any key, or you receive a call, the re-dialling is interrupted.

If the re-dialling is successful, the phone rings once to inform you.

# Receiving a Call

When you receive a call, the phone rings and the indicator light on the top of the phone blinks green rapidly. The display shows **Answer?** 

# **Answering a Call**

- · Press YES to answer the call
- When the call is finished, press NO

**Note!** Always answer the call before placing the earpiece to your ear. If the ring signal is loud it could damage your hearing.

# Rejecting a Call

• Press NO when the phone rings. The display now looks like this:

BusyTone

If the caller's network supports it, the caller will hear a busy tone.

If you have been unable to answer, or you have rejected a call, the number of the unanswered call will be shown in the **MissedCall** menu.

# **Putting a Call on Hold**

Press YES to put a call on hold. To put the call **off hold**, press YES again.

# Useful Information while Talking

This chapter describes how you can change the volume of the ear piece, use the display as a scratch pad, send DTMF tones, check the duration of the current call, show or hide your phone number (CLI – Calling Line Identification) and handle two calls simultaneously.

# Changing Volume while Talking

During a call, you can use the arrow keys to increase or decrease the ear piece volume.

# **Muting Microphone**

· Press and hold the CLR key.

# Using Phone as Scratch Pad

- Enter a phone number on the keypad while talking. When you end the call, the number remains in the display.
- 2. Press YES to make the call in the display.

# **Sending Tone Signals**

During a call you can press keys 0-9, \* and # to send DTMF tones. For example, to perform banking by phone or to control an answering machine.

# **Checking Time of Calls**

When you start a call (incoming or outgoing), the airtime is counted in minutes and seconds and shown on the display, like this:



# Calling Line Identification (CLI)

The Calling Line Identification service shows the caller's phone number when you receive a call. (You may have to order this service from your network provider depending on your network contract.) If the caller's name is stored in your phone book, you will see both the name and number.

# Showing Your Phone Number

If your subscription includes not showing your phone number when calling, you can chose to show the number on a particular call.

- 1. Enter the number you wish to call
- 2. Press the up arrow. The display shows Send Id
- 3. Press YES to make the call.

#### **Hiding Your Phone Number**

If your subscription includes showing your phone number when calling, you can hide your phone number on a particular call.

**Note!** The **Hide Id** function does not work with all networks.

- 1. Enter the number you wish to call.
- 2. Press the up arrow twice. The display shows **Hide Id?**
- 3. Press YES to make the call.

# **Handling Two Calls**

Your phone can handle two calls simultaneously. This allows you to hold one call and make or receive another, then you can switch between the two calls.

To be able to receive a second call, you must activate the Call Wait function.

#### Activating the Call Wait Function

• Press \* 43 # followed by YES. The display will say **Please Wait** followed by **ON**.

#### Deactivating the Call Wait Function

• Press # 43 # followed by YES. The display will say **Please Wait** followed by OFF.

#### Receiving a Second Call while a Call Is in Progress

When you receive a second call, you will hear a tone in the earpiece and the display shows CallWait.

 Press YES to answer the second call. The current The discall is put on hold. play now looks like this.

1 On Hold

• To **reject** the second call, press zero followed by

#### Switching Between Two Calls

Press YES to switch between the two calls.

#### Ending the Current Call and Return to the Held Call

- 1. Press NO to end the current call. The display shows **Retrieve?** and you hear two beeps.
- 2. Press YES within three seconds to return to the held

If you do not press YES within three seconds, the held call is automatically ended.

#### Making a Second Call while a Call Is in **Progress**

• Enter the second phone number and press YES. The first call is put on hold and the display looks like

#### Receiving a Third Call

If you are engaged in one call and have a second one on hold, you may receive a third call. You will hear a tone in the ear piece and CallWait is shown in the display.

You can only have one call on hold at a time, so you need to end the first or second call before you answer the third call.

You can do one of the following:

- Press zero followed by YES to reject the third call.
- · End the first call, retrieve the held call, and answer the incoming call
- End both calls. The phone rings and the question Answer? appears in the display. Press YES to answer the call.

# Navigating the Menu System

This chapter describes how you navigate through the menu system to get maximum use of your phone.

# The Menu System

You control the functions of your phone by a menu system.

Some menus have submenus that have individual settings. If the menu has submenus, three dots appear after the menu name. See the example below:

Settines...

# Moving Through the Menu System

Use these keys to move through the menu system and to find the different menus.





When you reach the desired menu, press YES to choose the menu. Use the 4/4 keys until you reach the function or setting you want. Then, in the same way as you chose a menu, press YES to select the setting or function.

Press this:	To:
YES	Confirm a setting or a selection.
NO	Reject a setting or a function.
CLR	Return to the standby display.
þ.	Scroll to the right in the menu system.
4	Scroll to the left in the menu system.

#### Glossary

These terms will be used throughout the manual.

**Scroll**: Pressing the left or right arrow key to move between the menus.

Select: Scrolling to a menu and then press YES.

Enter: Keying in letters or numbers from the

keypad.

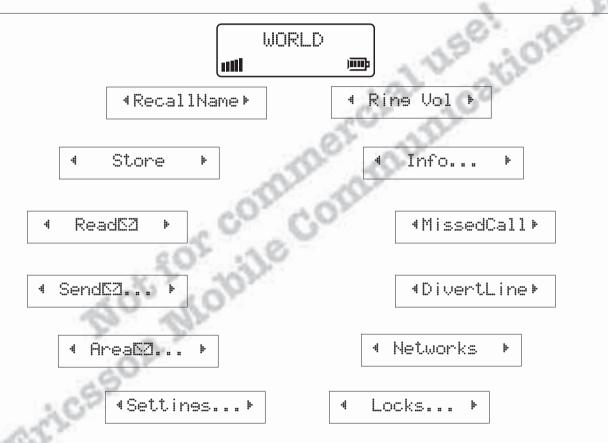
# Selecting the Ring Vol(ume) Menu

 Press CLR to clear the display.
 Press the right arrow key until you reach the Ring Vol(ume) menu.

2. Press YES.
You are now in the **Ring Vol(ume)** menu.

3. Press the arrow keys to change the ring volume and then press YES to confirm.

# Menu Overview



# Creating Your Own Phone Book

This chapter describes how you can store phone numbers both on your SIM Card and in your phone's own memory.

#### The Phone Book

You can store phone numbers both on your SIM Card and in your phone's own memory. The difference between the two is that you can remove the SIM Card and use all those numbers in other phones, while the phone's memory always stays the same no matter which SIM Card is inserted.

You can store up to 50 phone numbers in the phone memory. The number of phone numbers you can store on your SIM Card is SIM Card dependent.

#### International Numbers

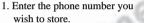
If you intend to use your phone book both at home and abroad, you should store all phone numbers as international phone numbers, i.e. with the international prefix + and the country code before the area code (without any leading zero) and the number.

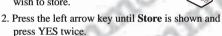
 To enter the plus prefix, press and hold the zero until you see the plus in the display.

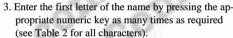
#### Speed Dialling

The phone numbers that your store in positions 1–9 on the SIM card can be called by entering the position number and then pressing YES. You should, therefore, save positions for 1–9 for important numbers.

# Storing Numbers on SIM Card







Enter the next letter when the cursor has moved to the next letter position. The number of letters the name can have is SIM card dependant.

4. Press YES when you have finished enter the name.

If you want to store the phone number in the storage position suggested in the display, go directly to step 5.

If you want to store the number in a different position, press CLR to erase the position number displayed and enter another number.

Press YES to confirm the position number. The display shows Stored.

If you have selected a position number that is already occupied, **Overwrite?** Is displayed. Press YES to

overwrite or NO to return to the position number and change it.

# Storing Numbers in Phone's Memory

Follow the same procedure as storing a phone number on the SIM card up to step 4. When you are prompted to set a storage position, press # once to enter ¤ character (which indicates storage in phone memory) and twice to have the phone suggesting the first free storage position.

Press YES to confirm the storage.

# **Recalling Phone Numbers**

You can recall a phone number any time from either the SIM card or the phone memory. You can recall the phone number by either the name or the storage position.

#### Recalling by Name

- 1. Press CLR to erase any digits from the display.
- 2. Select the RecallName menu. You are prompted to enter a name.
- 3. Enter either the full name of the first letter and press YES.

The first name that matches the letter string is displayed. If needed, scroll to the name you want. Press the \* key to see the storage position.

4. Press YES to call the number.

### **Position Recall**

# Recalling by Number – Speed Dialling

- 1. Press CLR to erase any digits from the display.
- 2. Enter a position number between 1 and 9.
- 3. Press YES to make the call.

#### From SIM Card

- 1. Enter the position number and press #.
- 2. Press YES to call the number, or scroll until you find the number you want to call and press YES.
- Press CLR or NO to return to the standby display with the number showing.

#### From Phone Memory

- 1. Press and hold # until the ¤ symbol is shown.
- 2. Enter the position number.
- 3. Press # to recall number.

Press YES to call the number, or scroll until you find the number you want to call and press YES.

# **Deleting Storage Position**

- 1. Select the RecallName menu.
- Choose the name you want to delete, press and hold CLR.
- 3. Press YES at the Erase prompt.

-0	Numbe	r of ti	mes to	o pres	s the	key f	or the	requ	ired c	harac	cter:	
Key	1	2	3	4	5	6	7	8	9	10	11	12
1	space	-	?	!	,		:	"	'	(	)	1
2	A	В	С	Å	Ä	Æ	à	Ç	2			
3	D	Е	F	è	É	3	Δ	Φ				
4	G	Н	I	ì	4							
5	J	K	L	5	Λ							
6	M	N	О	Ñ	Ö	Ø	Ò	6				
7	P	Q	R	S	В	7	Π	Σ				
8	Т	U	V	Ü	Ù	8						
9	W	X	Y	Z	9							
0	0	++	&	@	/	\$	%	£	θ	Ξ	Ψ	Ω
#	*	#										

Table 2. List of keypad numbers, symbols and letters. Press \* to get lower-case letters. Press and hold a key to get the number directly.

#### **Last Dialled Numbers**

Your phone can store the 5 last dialled numbers.

#### Recalling From List of Last Dialled **Numbers**

- 1. Press CLR to erase any digits from the display.
- 2. Press YES. The number last called is shown.

3. Press YES to call the number or scroll to the number you want to call and then press YES.

#### **Unanswered Calls**

athe mine Press C..

• Scroll between Sometimes you are unable to answer a call. Then the

#### Checking Unanswered Calls

Select the MissedCall menu. A number, a name or Unknown is shown.

Now do one of the following:

- · Press YES to call the number.
- · Press CLR to erase the call.
- Scroll between the entries.

# Personalizing Your Phone

This chapter describes how you can personalize your phone to meet your own requirements.

# **Changing Ring Volume**

- 1. Select the Ring Vol menu.
- 2. Scroll to the desired ring volume, press YES.

#### Turning Off Ring Volume

- 1. Select the Ring Vol menu.
- Press the left arrow key until no squares are lit and press YES.

The standby display now looks like this:

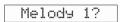


# Ring Type

You can choose between different types of ring signals.

#### Changing Ring Type

1. Select **Ring Type** in the **Settings** menu. The display now looks like this:



- 2. Press the right or left arrow to listen to the different ring types.
- 3. Press YES to select your preferred ring type.

# **Display Language**

Your phone has many languages that you can choose for your display texts. If your SIM Card supports the automatic function, the phone has automatically chosen the SIM Card default language.

**Note!** When you change language, you change all display texts immediately.

# Changing Display Language

- 1. Select Language in the Settings menu.
- Scroll to the language you want to have for the display texts.
- 3. Press YES to select the language.

#### Resetting Display Language to English

- 1. Clear the display.
- 2. Enter the digit string \*#0000#.

# **Changing Key Sound**

- 1. Select **Key Sound** in the **Settings** menu.
- 2. Select the key sound you want.

# **Diverting Calls**

This chapter describes the divert function.

When supported by your service provider, you can use the **DivertLine** menu to divert (forward) your calls to another number, for example your voice mail or home phone.

**Note!** If your SIM Card and your service provider support two lines, you need to set each line separately. Here we assume you have one line.

The divert service lets you divert:

- All calls: regardless of if your telephone is turned on or off.
- Unanswered calls: if you do not answer within 30 seconds, if your phone is busy, turned off or out of reach of a network.

As a reminder, the display will inform you about any activated call divert each time you turn on the phone.

**Note!** The arrow will only be visible in the display when ALL CALLS is activated.

# **Diverting Your Calls**

- 1. Select the **DivertLine** menu.
- 2. Select a divert option.
- 3. Chose Activate and press YES



You may now do one of the following:

- Enter a number at the prompt where you want your calls to be diverted, including the area code, and press YES.
- Press the left arrow key to enter a name from your phone book and press YES.
- Use the phone number that is suggested and press YES.

You will only get a number suggested if you have activated the divert function before.

There may be a short delay before the network responds to your divert option, and your display will prompt you when the divert is active (on or off).

Your standby display looks like this when the divert is active:



# Viewing Status of Call Divert

- 1. Select the DivertLine menu.
- Select the divert option you wish to view and choose GetStatus.

There may be a short delay before the network responds, and your display will inform you which divert is active (on or off).

# **Cancelling Call Divert**

- 1. Select the **DivertLine** menu.
- 2. Select the divert option you wish to cancel and choose **Cancel** and press YES.

There may be a short delay before the network responds, but you will be prompted that your divert is cancelled.

# Protecting Your Keypad, Phone and SIM Card

This chapter describes the different locks that you can use to protect your phone. These are the only ways of protecting your phone in case of theft.

#### Locks

Your phone has three types of locks:

- Keypad lock (does not protect in case of theft)
- Card lock (comes with your subscription)
- Phone lock (a feature provided by your phone)

The card and phone locks are found in the LOCKS menu and you find the keypad lock in the SETTINGS menu.

# **Keypad Lock**

You can lock the keypad so that unintentional key action has no effect if the phone is turned on when you are carrying it in a handbag or pocket. When activated, the keypad lock is turned on 20 seconds after the last key action. And the standby display shows \*Keylocked.

The keypad remains locked until your

- · answer or reject a call.
- · unlock the keypad yourself.

**Note!** You can always make the international emergency call 112 when the keypad is locked.

#### Setting the Keypad Lock

- 1. Select **Kev Lock** in the SETTINGS menu.
- 2. Select Auto.

To turn off the automatic keypad lock, select the **Off** option.

#### Unlocking Keypad

• Press + and press YES.

# Card Lock (SIM)

The card lock protects your SIM Card. When the card lock is active, you will always be prompted to enter your PIN at start-up.



#### PINs and PUKs

When you buy your SIM Card, you obtain a 4-to 8-digit PIN (Personal Identity Number) and a longer PUK (Personal Unblocking Key). If your SIM card allows it, you can turn off the card lock.

The PIN is the code that you enter to get access to and activate your subscription. PIN 2 is used with special functions and is provided to you by your network.

The PUK (and PUK 2 – provided to you by your network operator or service provider) is a longer code

that helps you unlock your phone when you have forgotten the PIN (PIN 2).

# **Changing PIN**

- 1. Select CardLock in the Locks menu.
- 2. Select NewPIN.
- 3. Enter the old PIN at the prompt and press YES.
- 4. Enter the new PIN and press YES.
- 5. Repeat the new PIN at the prompt and press YES.

# **Unblocking with PUK**

If you have entered the PIN incorrectly three times in a row, the display will read:

PUK:

- 1. Enter your PUK and press YES.
- 2. Enter a new PIN at the prompt and press YES.
- Repeat the new PIN at the prompt and press YES.If you entered both the PUK and the PIN correctly, the display will read:

New PIN

#### **Phone Lock**

The phone lock protects the phone against unauthorized use of the phone if it is stolen. The phone lock is not activated when you buy the phone.

These are the two types of phone locks:

#### Autolock:

You need to enter the phone lock code every time you change SIM card in the phone.

#### Full lock:

You need to enter the phone lock code every time you turn on the phone.

#### Changing Phone Lock Code

- 1. Select Phone Lock in the Locks menu.
- 2. Select New Code.
- 3. Enter 0000 at the prompt (the factory default code) or your own code and press YES.
- AES, sonal code at the p

5. Repeat the new code at the prompt and press YES.

# (Un)Locking Phone

- 1. Select Phone Lock in the Locks menu.
- 2. Select the desired lock option, for example Auto
- 3. Enter 0000 (the factory default code) or your own phone lock code at the prompt and press YES.

To unlock the phone, choose Unlock in the LOCKS

# Barring Calls – Restricting Calls

This chapter describes how you can bar (restrict) calls to and from your phone. This feature is available in your phone, but might not be supported by your subscription.

The call barring service lets you control which kind of calls can be made to or from your phone. This feature is convenient if you lend your phone to somebody else. This feature is GSM service dependent.

#### **Barring Options**

Your phone supports the following barring options (but your subscription might not support all):

- · all outgoing calls
- · all outgoing international calls
- all outgoing international calls except to your home
- all incoming calls
- · all incoming calls when you are abroad

Note! To activate any of the barring functions, you need a password that comes with your subscription.

# **Activating Call Bars for Any** Call Type

- 1. Select **Barring** in the Settings menu.
- 2. Select either **Incoming** or **Outgoing**.
- 3. Select the barring option you want.
- 4. Select Activate.
- tion) and p. as your PIN couc 5. Enter your password (provided with your subscription) and press YES. The password is not the same

There may be a short delay before the network responds and your display will prompt you which call bars have been activated.

6. Press CLR to stop the responses from the network.

### **Cancelling All Call Bars**

- 1. Select Barring in the SETTINGS menu.
- 2. Select the Cancel All option.
- 3. Enter your password at the prompt and press YES. There may be a short delay before the network responds and your display will inform you which call bars have been cancelled.
- 4. Press CLR to stop the responses from the network.

# Sending and Receiving Text Messages

This chapter describes SMS, what you need to do before you can send messages, how you send messages, and how you read messages. This service is network dependent.

# **Text Messages**

The Short Message Service (SMS) function allows you to send and receive text messages that contain up to 160 characters. Text messages can be received when the phone is in standby mode, when you are engaged in a call, or when incoming calls are diverted to another phone number. Also, if you have had your phone turned off for a while the network will keep track of the message and send it to your phone as soon as it is turned on.

After a message is received, it is left in the phone's memory. The message remains in the phone's memory until you read it. You can even turn off the phone and the message will remain intact. If you, on the other hand, change SIM Card, you will lose the unread message. This is because messages should be personal.

**Note!** You need to set the service center number before you can send any messages. If you only want to receive messages, you do not need to do anything.

# **Checking Subscription**

 Call your service provider to see which services your subscription supports, or check the se vice provider's manual.

#### Setting Service Centre Address

- 1. Check the service centre address (number) for your service provider.
- 2. Select Serv Cent in the Send menu.
- 3. Enter the service centre address with the international prefix and press YES.

# **Sending SMS**

- 1. Select New in the Send menu.
- 2. Enter your message and press **YES**. You can also enter a phone number.

See Table 2, p. 13, for all letters and symbols available.

3. Enter the phone number you want to send your message to and press YES.

Or press the left arrow key to enter a name you want to send to and press YES.

The display now looks like this:



# Receiving a Message

When you receive a message the display looks like

At the same time you will hear a beep as loud as the ring signal and the green light on top of the phone will flash.

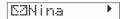


#### Reading an Incoming Message

- Press YES when you have received a message.
   The display will show you the time of the incoming SMS, you can see the date by pressing \*.
- 2. Press YES.

The display will show you which phone number the message is sent from, or the name if stored in your phone book.

The display could now look like this:



The arrow shows that you can start scrolling through the message with the right arrow key

3. Press the right arrow key to read the message.

When you have read a message, you can do one of the following:

- Call a phone number in the message by pressing
- Erase the message by pressing YES at the erase prompt.
- Store the message by pressing NO at the erase prompt (you may get a reply prompt if the sender ane Stu.
  SIM Card. has required a reply). Press YES at the **Store** prompt and the message is stored on the SIM Card.

# Reading an Old Message

- 1. Select the READ menu.
- 2. Scroll to the message you want to read and press
- 3. Read through the message by pressing the right arrow key.

#### Erasing a Message

• Press CLR any time during the message and answer YES on the question prompt.

# Receiving Area Information

This chapter describes how you can make your phone available for Area Information (AI). This service is network dependent.

#### **Area Information**

While the SMS function is a personal service with messages directed to you, the Area Information is a broadcast type message that is sent to all subscribers in a certain cell, for example a section of a city, at the same time. You can set your phone to receive only those types of messages you want to listen to, e.g. the local weather forecast or the local traffic report. Each message is identified by a 3-digit code. Check with your service provider for which message types are available in your network.

When you receive AI (Area Information) the display looks like this:



The default setting for the phone is that the AI service is turned off.

At present the following message types exists:

Code	Title
000	Index
010	Flashes
020	Hospitals
022	Doctors
024	Pharmacy
030	Long-distance road reports
032	Local road reports
034	Taxis
040	Weather
050	District
052	Network information
054	Operator services
056	Directory enquiries (national)
057	Directory enquiries (international)
058	Customer care (national)
059	Customer care (international)

# Activating the Area Information

• Select On in the Area Info submenu.

# Adding a Code

- 1. Select Edit List in the Area Info submenu.
- Press the right arrow key to find the first empty position and press YES.
- 3. Enter a new code and press YES.

  The display could now look like this if you have added the pharmacy code to the second position:

# **Erasing a Code**

- 1.Select Edit List in the Area Info submenu.
- 2. Scroll to the position (to the left in the display) you wish to erase and press YES.
- 3.Press YES at the erase prompt.

### **Changing a Code**

- 1. Select **Edit List** in the **Area Info** submenu.
- Scroll to the position (to the left in the display) you wish to change and press YES.
- 3.Scroll to New Code and press YES.
- 4.Enter the new code and press YES.

# Other Networks

This chapter describes how you select a different network when you are out of range of your home service provider's network.

# **Selecting a Network**

When you turn on the phone, it selects its home network. If this is not within range, you might not be able to get any reception or, if you are abroad, you can choose a different network, provided your service pro-ی list for a deser. ا این الفتاریکی المی الفتاریکی الفتاریکی الفتاریکی الفتاریکی الفتاریکی الفتاریکی المی الفتاریکی vider has an agreement allowing you to use the network. This is called roaming.

When you select the Networks menu, the phone automatically searches for all networks present in the area you are in. Each network that is found, has a status indication telling you whether the network is available

See the following list for a description of the status in-

W ALLEY					
Display:	Meaning:				
Network and #	home network				
Network and *	currently used network				
Network and A	other available networks				
Network and S	other available networks (given priority by your home service provider)				
Network and F	forbidden networks				
Auto	automatic network search				

# Two Line Service

Two different voice lines with two different phone numbers, Line 1 and Line 2, may be assigned to your phone. The ability to receive and send text messages (SMS) is, however, only available on Line 1. The Two Line service may not be available on all networks and may require a separate subscription.

# Selecting a Line

If you have the Two Line service, you can press the up arrow to reach a particular menu which lets you select Line 1 or Line 2 by pressing YES.

**Note!** Instead of accessing the menu system, you can press and hold down the 1 or 2 key to change line when the phone is in standby mode. Clear the display first by pressing CLR.

The selected line is indicated as L1 or L2 at the bottom of the display.

From now on, all outgoing calls are made on the selected line. You can, however, be called on both lines.

When someone calls you, the question **Answer?** is replaced by **Line1?** or **Line2?** depending on the currently selected line.

If you are already engaged in a call on one line, you must end it to answer a call on the other line.

# Different Settings for Each Line

It is possible to have different settings for each line, for example, the ring signal, call diverts, call bars and call waiting function. The call time meters in the INFO menu show the call times (call costs) for the currently selected line.

# Personalizing Names for the Two Lines

In the SETTINGS menu there is a function, Line 1 Tag or Line 2 Tag, depending on the currently selected line. This function allows you to assign a name to each line. Twelve characters can be entered at the most

# The Call Time/Call Cost

This chapter describes how you can keep track of the call time and time cost.

### **About Duration of Calls**

Your phone is capable of keeping track of the following:

#### **Total Calls:**

This feature shows the total time of all calls in hours and minutes since the meter was last set.

#### **Outgoing Calls:**

This feature tracks the time of all your outgoing calls in hours and minutes since the meter was last set.

#### Last Call:

This feature tracks the duration of your last call in minutes and seconds.

The duration of the call appears in the display after a call is finished. The total time of all calls is recorded in the phone and is also default.

# **Viewing Calling Information**

There are two ways to view the calling information:

- Look at the display for the duration of your call when it is ended.
- Select the **Info** menu to view all options.

# **Resetting a Call Meter**

- 1. Select the **Info** menu.
- Scroll to the meter option you want to reset and press YES.
- 3. Press YES at the reset prompt.

#### **About Call Cost**

If both the network and your SIM card support it, the duration of calls can be displayed as cost instead of time. If you wish to, you can specify a price for each call unit that is received from the network while a call is in progress.

#### Activating the Call Cost Display

- 1. Select Call Info from the Settings menu.
- 2. At the prompt Cost?, press YES.

#### Specify the Price per Call Unit

- 1. Select Set Price? from the Info menu.
- 2. If you wish to, you can enter the currency, for example, GBP for Pounds Sterling.
- At the prompt Curr: enter the currency and press YES.
- If you do not wish to enter a currency, just press YES at the prompt **Curr:**.

- 3. Enter the price per call unit. To enter a decimal point, press \*.
- 4. Press YES to finish.
- 5. Enter the PIN2 code and press YES.

#### Viewing the Call Cost

You can view the cost (or the number of call units) of the last call in the display when you end the call. To view the total cost (or the total number of call units), select the **Info** menu.

#### Resetting the Total Cost Meter

- Select the **Info** menu to display the total cost and press YES.
- 2. At the prompt **Reset?**, press YES.
- 3. Enter the PIN2 code and press YES.

### **Cost Limit Option**

If you have activated the call cost display, you can also specify a cost limit. The cost of each call will then be deducted from the specified amount. 30 seconds before the remaining amount is equal to zero, two beeps are heard as a warning.

#### Specifying a Cost Limit

- 1. Select **Credit** from the **Info** menu.
- 2. Select New Credit.
- 3. Enter the cost limit and press YES.

4. Enter the PIN2 code and press YES.

Info menu and then scroll to the Credit function. The word Credit and the remaining amount toggle in the

# Your Phone and Accessories

This chapter describes a few of the accessories that are available for your phone.

#### **Front Panel**

You can change the front panel of your phone! This allows you to match the phone to any of your different moods.

# **Handsfree Equipment**

Trices Sold Bull Chiles Contains If you drive and use your phone, you can connect the phone to a handsfree equipment. In some countries the

mobile phone must be connected to handsfree equipment if it is going to be used while driving.

#### Answering/Rejecting Calls with Handsfree

· Press any key, except NO to answer a call. NO rejects the call.

#### **PC-Card**

Your phone is capable of receiving fax and data calls through a PC-card (PCMCIA). For the best result with fax and data transmission, connect the phone to a suitable Mobile Office Kit (ask your retailer which kit suits your phone).

Note! In order to receive data/fax communication a multi-numbering scheme is required.

		$\boldsymbol{C}$		D	10
Index		Call		Divert icon	2.7
		on hold	8	Diverting calls	17
4		Call cost		about	17
ΑI		Viewing	26	cancelling	17
Area information	23	Call cost display	3,72	view status	17
Area information	23	Activating	26	Duration of calls	26
activating	23	Call meter	03	E	
adding codes	23	Resetting	26	Enter	11
changing codes	23	Call time/Call cost	26	Erasing text message	22
erasing codes	23	Call wait	200	C	
Autolock	19	activating	10	G	
В		deactivating	10	Glossary	11
		Calling information		I	
Barring calls	36.	Viewing	26	International numbers	
activating	20	Calls		storing	13
cancelling	20	barring	19		_
Battery	3-	restricting	20	K	
about	5	CLI	9	Key sound	
Battery icon	7	Cost limit		changing	16
Busy tone	8	Specify	27	Keypad	
	C	эреспу	21	lock	18
- C - C - C - C	(P)			umlo als	10

Keypad lock		3.4		locks	1
activating	18	M		memory	1:
turning off	18	Memory		unlocking	_ 6 1
$\overline{L}$		erasing names/numbers	14 13	Phone book	Chr.
Language		SIM	13	about	1:
display, changing	16	speed dialling	13	Phone icon	
reset	16	Messages	03	Phone number	
Last dialled numbers		text messages	21	deleting	1
recalling	15	Microphone	21	hiding	!
Letter icon	7	mute	9	showing	
Line		Moving through menus	11	PIN	
select	25	Muting amough monas	9	about	13
Line indicator icon	7			changing	13
Lines		N		PIN 2	13
different settings	25	Navigating the menus	<b>-</b> 11	Position recall	
personalize names	25	0		from phone	1-
Lock	400	Overview		from SIM	1-
phone	19	menus	12	Price per call unit	
Locks		$\overline{P}$		Specify	2
keypad	18	Phone		Protecting phone	13
SIM	186	locking	19	PUK	13
- 2	0	locking code	19	about	13
		locking code	1/		

				-0-
R		text messges	21	100
Reading text message	22	Speed dialling	14	1 100
	22	Stopping calls	0.	v9
Recalling		barring calls	19	25
by number	14	Storing numbers	100	120
Ring signal		phone memory	13	Chr.
icon	7	SIM card	13	2
ring volume	16		"C" "	
Ring type		T	234	
chaning	16	Text message	200	
Ring volume		erasing	22	
muting	16	saving	22	
Roaming	24	sending	21	
S	-	Text messages		
		reading	21	
Scroll	11	Total cost meter		
Select	- 11	Resetting	26	
Service centre	20	Two calls	9	
setting	21	100	-	
Setting keypad lock	18	$oldsymbol{U}$		
Signal strength icon	7	Unanswered calls	15	
SIM card	0,2	Unblocking	18	
protecting	18			
SMS				